

REMARKS

Reconsideration and allowance of this application are respectfully requested in view of the above amendment and the discussion below.

Prior to discussing the nature of the present invention, Applicants, through their attorney wish to thank the Examiner in charge of this application for the courtesies extended during the June 15 discussion at which time the nature of the invention, as defined by the claims, was discussed with respect to the prior art cited in the rejection.

As detailed in the specification, the present invention concerns an audio system for a motor vehicle and more particularly a signal receiver with two amplifiers. One of these amplifiers is supplied for low audio frequencies and has an higher input voltage than the operating voltage of the other amplifier which is provided for a higher frequency.

Prior art devices operating on a 12 volt system for an automobile use the same voltage for all frequencies, as discussed in the present application. As also discussed in the specification in the instance of low frequency response speakers with a resistance of 8 ohms a noticeable distortion occurs in powerful amplifiers. On the other hand, if a higher operating voltage is used for the amplifier the harmonic distortions results in audible noises. These higher voltages on automobile result from newer designed automobiles having 42 volts power systems.

The present invention utilizes higher voltage for only a low frequency amplifier and retains the lower voltage for another amplifier for other frequencies. This is an efficient use of the power because the high power yield is not required for the medium to high frequency range where 12 volts is a sufficient power yield.

The above discussion of the 42 volt and the 12 volt systems in automobiles was also discussed during the interview of June 15, 1004.

Claims 3, 5-6 and 7 have been rejected under 35 U.S.C. 102 as anticipated by Milne et al. U.S. Patent No. 5,983,087 while claim 4 has been rejected under 35 U.S.C. 103 as unpatentable over Milne et al. in view of Applicants admitted prior art.

According to the statement of the rejection, the reference to Milne et al. has a audio amplifier 76 which reads on at least one amplifier connected to a speaker by crossover filter characteristic with one of the speakers being a woofer and additional subwoofer which reads on a separate amplifier.

Applicants submit that the reference to Milne et al. has no discussion of a voltage system for the automobile operating at two different voltage levels for two different amplifiers.

The reference to Milne et al. '087 addresses a radio with a tuner using a digital signal processor to enhance the audio signal. The digital signal processor is user programmed and there is no indication of any voltage source other than the battery shown in Figure 3. The power mode circuit 66 is supplied by the

vehicle battery and controls power to turn off the power when the audio system is off and to turn on the power after the system is turned on.

Therefore there is no showing of two separate amplifiers powered by two separate voltage sources as claimed in each of independent claims 3 and 5. Additionally, dependent claims 4 and 6-7 include the respective limitations of independent claims 3 and 5 with claim 4 further specifying that the operating voltage of the separate amplifier is at least 42 volts while the other amplifier has 12 volts.

It is to be particularly noted that claim 3 requires that the separate amplifier be supplied with a "significantly higher operating voltage" than the other amplifier.

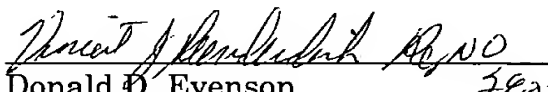
In response to the objection to the Abstract and the claims 4, 6 and 7, Applicants have amended claims 4, 6 and 7 as well as the specification to overcome the Examiner's objections.

Therefore in view of the distinguishing features between the claimed invention and the reference which features are not shown or disclosed or made obvious by the reference, Applicants respectfully request that this application, containing claims 3-7, be allowed and be passed to issue.

If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket #080437.49898US).

Respectfully submitted,

For 
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